

Huawei OptiXstar EG8145B7N-50 Datasheet 01

Huawei intelligent GPON and Wi-Fi 7 routing-type ONT

Overview

The Huawei OptiXstar EG8145B7N-50 is a GPON and Wi-Fi 7 routing-type ONT. It uses the GPON and Wi-Fi 7 technologies to implement ultra-broadband access, high performance and wide coverage for users. The high forwarding performance ensures the user experience of voice and data services, and provides customers with an ideal all-optical access solution and future-oriented service support capability.

It provides one 2.5GE port, three GE ports, one POTS port, one USB port and 2.4GHz&5GHz Wi-Fi 7 function.

- Next generation Wi-Fi 7 technology
- Smart service
- Smart interconnection
- Smart O&M



Device Parameters

Dimensions (H x W x D)	40 mm x 150 mm x 108 mm (without external antenna and pads)	Static power consumption	5 W
Weight	About 282 g	Maximum power consumption	14 W
Operating temperature	0°C to 40°C	NNI	GPON
Operating humidity	5% RH to 95% RH (non-condensing)	UNI	1x2.5GE+3xGE+1xPOTS+1x USB*+2.4GHz/5GHz Wi-Fi 7
Power adapter input	100–240 V AC, 50/60 Hz	Optical connector	SC/APC
System power supply	12 V DC, 1.5 A	Indicators	Power/PON/LOS/2.5GLAN/LAN2/LAN3/LAN4/TEL/USB/WLAN/WPS
Memory	128 MB Flash, 512 MB RAM	-	-

NOTE

*: A plug-and-play USB port reserved for users.

Interface Parameters

GPON port	POTS port
- Class B+ - Receiver sensitivity: -27 dBm - Overload optical power: -8 dBm - Wavelengths: US 1310 nm, DS 1490 nm - Wavelength blocking filter (WBF) of G.984.5 - Flexible mapping between GEM Port and TCONT - GPON: consistent with the SN or password authentication defined in G.984.3 - Bi-directional FEC - SR-DBA and NSR-DBA	- Maximum ringer equivalence number (REN): 4 - G.711A/μ, G.729a/b and G.722 encoding/decoding - T.30/T.38/G.711 fax mode - DTMF - Emergency calls (with the SIP protocol)
	USB port
	- USB2.0 - FTP-based network storage - File/Print sharing based on SAMBA - DLNA function
WLAN	Ethernet port
- IEEE 802.11 b/g/n/ax/be (2.4GHz) - IEEE 802.11 a/n/ac/ax/be (5GHz) 2×2 MIMO (2.4GHz&5GHz) - Antenna gain: 5 dBi - Air interface rate: 688 Mbit/s (2.4GHz), 2882 Mbit/s (5GHz) 4096 QAM 160 MHz frequency bandwidth - OFDMA - MU-MIMO	1x2.5GE+3xGE - Ethernet port-based VLAN tags and tag removal 1:1 VLAN, N:1 VLAN, or VLAN transparent transmission - QinQ VLAN - Limit on the number of learned MAC addresses - MAC address learning - GE port supports auto-adaptive 10 Mbit/s, 100 Mbit/s or 1000 Mbit/s 2.5GE port supports auto-adaptive 10 Mbit/s, 100 Mbit/s, 1000 Mbit/s or 2500 Mbit/s

• DCM • BSS Coloring • Beamforming • Band steering • WPA3 • MLO (Multi-Link Operation) • Multi-RU • WMM/Multiple SSIDs/WPS	
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Product Function

Smart interconnection	Smart service	Smart O&M
• Smart Wi-Fi coverage • SIP/H.248 auto-negotiation • Any port any service • Parental control	• Scheduled Wi-Fi shutdown • Smart Wi-Fi sharing: Portal/802.1x authentication; SoftGRE-based sharing	• IPTV video quality diagnosis • Rogue ONT detection and isolation from the OLT • Call emulation, and circuit test and loop-line test • PPPoE/DHCP simulation testing • Neighboring AP scanning
Multicast	Power saving	
• IGMP v2/v3 snooping • IGMP v2/v3 proxy • MLD v1/v2 snooping	• Indicator power saving • CoC v8	
Security	Common O&M	Layer 3 features
• SPI firewall • Filtering based on MAC/IP/URL addresses • Secure boot	• OMCI/Web UI/TR069 • Variable-length OMCI messages • Dual-system software backup and rollback	• PPPoE/Static IP/DHCP • NAT/NAPT • Port forwarding • ALG, UPnP • DDNS/DNS server/DNS client • IPv6/IPv4 dual stack, DS-Lite and IPv6 SPI • Static/Default routes • Multiple services on one WAN port
QoS	Home network feature	
• Ethernet port rate limitation • 802.1p priority • SP/WRR/SP+WRR • Broadcast packet rate limitation	• Visualized home network management • User-defined bandwidth allocation • Wi-Fi optimization & Wi-Fi roaming • Wi-Fi O&M	

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